

REMARKS / ARGUMENTS

Status of Claims

Claims 1-15 are pending in the application and stand rejected. The Examiner comments that Claims 4-9 would be allowable if rewritten to overcome the rejections at set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's comments regarding the allowability of the noted claims. In addition to clarifying remarks, Applicant has amended Claim 4, and has added new Claim 16, leaving Claims 1-16 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §102(b), and 35 U.S.C. §103(a), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Status of Drawings

The Examiner comments that the drawings filed on 05 November 2004 are accepted.

However, in an effort to clarify the record, Applicant finds a Response to Restriction Requirement having been filed 05 November 2004, and the drawings having been filed 15 March 2004. Accordingly, Applicant respectfully requests notice of acceptance of the drawings filed 15 March 2004 and the drawing amendments filed herewith.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 1-15 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

Regarding Claims 1 and 13, the Examiner requests Applicant to clarify what is intended by “degree of freedom”, alleging that it is not clear what the “degree of freedom” is relative to.

Regarding Claim 4, the Examiner requests Applicant to clarify what is meant by “tends to.”

Regarding Claim 10, the Examiner requests Applicant to clarify how the first and second air gaps are adjusted both simultaneously and independently.

Regarding Claims 1, 7, 13 and 15

While not specifically rejected under this section, Applicant herein also addresses Claims 7 and 15 since they also contain “degree of freedom” language.

The Examiner alleges that the “degree of freedom” language is not clear as to “what the ‘degree of freedom’ *is relative to.*” Paper 011505, page 2 (emphasis added).

Applicant respectfully disagrees with this allegation.

Regarding Claim 1, Applicant submits that Claim 1 recites, inter alia, “...*a crossbar* directly coupled to *the trip unit* with *a degree of freedom therebetween*, and directly coupled to *the support frame* with *a degree of freedom therebetween*; and *a trip bar* directly coupled to *the support frame* with *a degree of freedom therebetween*...” (Emphasis added).

Regarding Claim 7, Applicant submits that Claim 7 recites, inter alia, “...*a cage* coupled to *the crossbar* with *a degree of freedom therebetween*, coupled to *the tripping member* with *a degree of freedom therebetween*, and coupled to *the actuator* with *a degree of freedom therebetween*...” (Emphasis added).

Regarding Claim 13, Applicant submits that Claim 13 recites, inter alia, “...*a magnetic trip unit* coupled to *the crossbar* with *a degree of freedom therebetween*...” (Emphasis added).

Regarding Claim 15, Applicant submits that Claim 15 recites, inter alia, “...*a cage* coupled at one end to *the plunger* with *a degree of freedom therebetween* and coupled at the opposite end to *the crossbar* with *a degree of freedom therebetween*... wherein *the*

actuator is coupled to *the cage* with *a degree of freedom therebetween...*” (Emphasis added).

Here, Applicant has clearly and precisely described and claimed:

a crossbar having a degree of freedom relative to *the trip unit, the crossbar* having a degree of freedom relative to *the support frame* , and *a trip bar* having a degree of freedom relative to *the support frame* in Claim 1;

a cage having a degree of freedom relative to *the crossbar, the cage* having a degree of freedom relative to *the tripping member*, and *the cage* having a degree of freedom relative to *the actuator* in Claim 7;

a magnetic trip unit having a degree of freedom relative to *the crossbar* in Claim 13; and

a cage having a degree of freedom relative to *the plunger , the cage* having a degree of freedom relative to *the crossbar* , and *the actuator* having a degree of freedom relative to *the cage* in Claim 15.

At page 3, first paragraph, Applicant clearly and precisely describes what the term “degree of freedom” refers to.

In an effort to further clarify what Applicant regards as the invention, Applicant has herein amended Figures 2 and 3 to more specifically illustrate the structure of the subject matter that Applicant regards as the invention.

The Examiner also requests Applicant to clarify the intent of the “crossbar remaining ‘substantially stationary’ during the tripping operation.” Paper 011505, page 2.

At page 3, first paragraph, Applicant describes how the crossbar remains substantially stationary during the tripping action.

At page 6, first paragraph, Applicant describes how the claimed invention may substantially reduce the trip level variation.

At page 7, last paragraph, Applicant describes some of the advantages that may be realized by some embodiments of the invention.

From the description of the claimed invention in the specification as filed, Applicant submits that “crossbar remaining ‘substantially stationary’ during the tripping

operation” is a consequence of an embodiment of the claimed invention, and therefore has the intent of providing some of the advantages described in the specification.

In view of the foregoing, Applicant respectfully submits that the claimed subject matter is described in such a manner that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, defined the claimed subject matter with a reasonable degree of particularity and distinctness, and therefore respectfully requests reconsideration and withdrawal of these rejections under 35 U.S.C. §112, second paragraph, which Applicant considers to be traversed.

Regarding Claim 4

Applicant has amended Claim 4 to more particularly point out and distinctly claim the subject matter regarded as the invention. Support for the claim amendment may be found in the specification as originally filed at page 5, lines 1-4. No new matter has been added.

In view of the foregoing, Applicant respectfully submits that the claimed subject matter is described in such a manner that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, defined the claimed subject matter with a reasonable degree of particularity and distinctness, and therefore respectfully requests reconsideration and withdrawal of this rejection under 35 U.S.C. §112, second paragraph, which Applicant considers to be traversed.

Regarding Claim 10

The Examiner alleges that it is not clear how the first and second air gaps are adjusted both simultaneously and independently. Paper 011505, page 2.

Applicant respectfully disagrees with this allegation.

At page 5, first full paragraph, Applicants states:

“Rotation of trip level adjuster 235 causes crossbar 210 to rotate about pivot 215, which raises or lowers cage 335, bias spring 340, actuator 325, and tripping member 320 in unison, thereby adjusting both first air gap 345 and second air gap 350. During a

calibration routine, first and second air gaps 345, 350 are both adjusted together by adjusting (in an embodiment rotating) trip level adjuster 235, and then second air gap 350 is adjusted separately by adjusting (in an embodiment rotating) tripping member 320 at slotted end 323, which causes actuator 325 to translate up or down by way of the threaded engagement discussed previously.”

Here, Applicant clearly and precisely describes how the first and second air gaps 345, 350 are adjusted in unison, and how the second air gap 350 is adjusted separately. More specifically, Applicant submits that trip level adjuster 235 is used to adjust the first and second air gaps 345, 350 in unison, and that tripping member 320 is used to adjust only the second air gap 350. By reference to the specification and drawings as originally filed, it will be understood by one skilled in the art that a resulting consequence of the described and illustrated structure is adjustment of the second air gap 350 while maintaining the first air gap 345 substantially stationary.

In view of the foregoing, Applicant respectfully submits that the claimed subject matter is described in such a manner that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, defined the claimed subject matter with a reasonable degree of particularity and distinctness, and therefore respectfully requests reconsideration and withdrawal of this rejection under 35 U.S.C. §112, second paragraph, which Applicant considers to be traversed.

Rejections Under 35 U.S.C. §102(b)

Claims 1-2 stand rejected under 35 U.S.C. §102(b) as being anticipated by Faber et al. (U.S. Patent No. 5,718,328, hereinafter Faber). The Examiner alleges that Faber discloses the claimed invention. Paper 011505, page 3.

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d

628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, “[t]he identical invention must be shown in as complete detail as is contained in the *** claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

The Examiner alleges that Faber discloses “a crossbar [84] directly coupled to the trip unit and to the support frame; and a trip bar [82] directly coupled to the support frame responsive to the trip force generated at the trip unit.” Paper 011505, page 3.

Applicant respectfully disagrees.

In considering Faber as referenced by the Examiner, Applicant finds Faber to disclose a trip unit 80 having a crossbar 82 and 84 (Col. 8 line 62, through col. 9 line 1, and Figure 5), and an operating mechanism 50 having frame sides 53 (Col. 6 line 57, through col. 7 line 5, and Figure 9), wherein the side frame 53 of the mechanism 50 is disposed in circuit breaker 10 adjacent yet separate from the trip unit 80 (see Figure 3).

The Examiner alleges that the Faber crossbar 84 is *directly coupled* to the Faber support frame 53. However, Applicant finds no support in Faber for this allegation and respectfully submits that the Examiner has not stated with specificity where such disclosure may be found.

The Examiner alleges that the Faber trip bar 82 is *directly coupled* to the Faber support frame 53. However, Applicant finds no support in Faber for this allegation and respectfully submits that the Examiner has not stated with specificity where such disclosure may be found.

By alleging anticipation absent specific reference to anticipatory elements that may be found in the cited reference, Applicant respectfully submits that the Examiner has failed to properly meet the burden of a showing of anticipation.

Absent anticipatory disclosure in Faber of each and every element of the claimed invention arranged as in the claim, Faber simply cannot be anticipatory.

Claim 2 is dependent from Claim 1 and therefore inherits all of the limitations of the parent claim.

In view of the foregoing, Applicant submits that Faber does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

Rejections Under 35 U.S.C. §103(a)

Claims 3 and 10-15, as best understood by the Examiner in view of the rejection under 35 U.S.C. §112, second paragraph, stand rejected under 35 U.S.C. §103(a) as being unpatentable over Faber in view of Kolberg et al. (U.S. Patent No. 5,831,501, hereinafter Kolberg).

Regarding Claims 3 and 13-14, the Examiner acknowledges that Faber does not disclose the specific structure of the trip unit and the adjustment means therefor, and looks to Kolberg to cure this deficiency. Paper 011505, page 4.

Regarding Claims 10-12, the Examiner alleges that the claimed method steps would have been necessitated by the product structure. Paper 011505, page 4.

Regarding Claim 15, the Examiner alleges that Kolberg further discloses the claimed invention. Paper 011505, page 4.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of

establishing that all elements of the invention are taught or suggested in the prior art.
MPEP §2143.03.

Applicant has provided clarifying remarks regarding the patentability of the claimed invention in reference to the rejections under 35 U.S.C. §102(b) provided earlier in this paper. Further to these clarifying remarks that detail the deficiency of Faber to anticipate the claimed invention of Claims 1-2, Applicant submits that Kolberg fails to cure this deficiency.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

Accordingly, Applicant submits that Kolberg fails to cure the deficiencies of Faber and therefore cannot properly be combined with Faber to establish a prima facie case of obviousness.

Regarding Claim 10 Specifically

Claim 10 recites, inter alia, "...adjusting both a first and a second air gap *in unison*... adjusting the second air gap *while maintaining the first air gap constant*..."

In looking to Kolberg to cure the deficiency of Faber, the Examiner has not stated with any degree of specificity where in the combination of Faber and Kolberg the claimed invention of "...adjusting both a first and a second air gap *in unison*... adjusting the second air gap *while maintaining the first air gap constant*..." is taught or suggested.

Absent a teaching or suggestion of each and every element of the instant invention, a prima facie case of obviousness cannot be established.

Regarding Claim 12 Specifically

Claim 12 recites, inter alia, "...the adjusting *both a first and a second air gap* comprises rotating *a trip level adjuster*..."

In looking to Kolberg to cure the deficiency of Faber, the Examiner has not stated with any degree of specificity where in the combination of Faber and Kolberg the claimed invention of "...the adjusting *both a first and a second air gap* comprises rotating *a trip level adjuster*..." is taught or suggested.

Absent a teaching or suggestion of each and every element of the instant invention, a prima facie case of obviousness cannot be established.

Regarding Claim 13 Specifically

Claim 13 recites, inter alia, “...***a crossbar*** pivotally arranged at the support frame and ***having a first adjuster for adjusting a first air gap...***”

Here, Applicant is claiming a crossbar having a first adjuster for adjusting a first air gap.

If Applicant were to accept the position of the Examiner, where the Examiner alleges that Kolberg teaches “a first air gap adjuster [162, figure 2] for adjusting a first air gap at the trip unit...” (Paper 011505, page 4), it necessarily follows that Kolberg does not teach or suggest ***a crossbar having a first adjuster for adjusting a first air gap***, since the first air gap adjuster [162] of Kolberg is not taught as being part of a crossbar.

In the instant invention, the crossbar is claimed to have the first adjuster for adjusting the first air gap.

Absent a teaching or suggestion of each and every element of the instant invention, a prima facie case of obviousness cannot be established.

Regarding Claim 15 Specifically

Claim 15 recites, inter alia,

“...***a plunger having an actuator adjustably arranged at a second end thereof***, thereby providing the second adjuster;

a cage coupled at one end to the plunger with a degree of freedom therebetween and ***coupled at the opposite end to the crossbar*** with a degree of freedom therebetween; and

a bias spring disposed between the actuator and the cage;

wherein ***the actuator is coupled to the cage*** with a degree of freedom therebetween...”

In looking to Kolberg to cure the deficiency of Faber, the Examiner alleges that Kolberg teaches “the dimension of the second air gap being responsive to adjustment of the second adjuster [figure 2]”. Paper 011505, page 4.

In alleging such a teaching, the Examiner is silent on where in the combination of Faber and Kolberg one may find such elements as

“...a plunger having an actuator adjustably arranged at a second end thereof, thereby providing the second adjuster;

a cage coupled at one end to the plunger with a degree of freedom therebetween and coupled at the opposite end to the crossbar with a degree of freedom therebetween;
and

a bias spring disposed between the actuator and the cage;
wherein the actuator is coupled to the cage with a degree of freedom therebetween...”

Absent a teaching or suggestion of each and every element of the instant invention, a prima facie case of obviousness cannot be established.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

In view of the foregoing clarifying remarks, in combination with the discussions earlier regarding the rejections under 35 U.S.C. §102(b), Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

Regarding Allowable Subject Matter of Claims 4-9

Applicant appreciates the Examiner's remarks that Claims 4-9 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §112, second paragraph, set forth in the instant Office Action and to include all of the limitations of the base claim and any intervening claims.

In view of the foregoing amendment and remarks, Applicant respectfully submits that Claims 4-9 overcome the rejections under 35 U.S.C. §112, second paragraph, and are directed to allowable subject. Accordingly, Applicant requests entry and notice of allowance thereof.

Regarding New Claim 16

Applicant has added new Claim 16, which is dependent on Claim 1, and which includes subject matter previously presented in Claims 3-5.

In view of the previous discussion relating to Claim 1 and the allowability of the subject matter presented in Claims 4-9, Applicant respectfully submits that new Claim 16 is directed to allowable subject and respectfully requests entry and notice of allowance thereof.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §102(b), and 35 U.S.C. §103(a), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

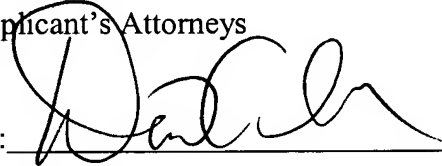
The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

By: 

David Arnold
Registration No: 48,894
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115

AMENDMENTS TO THE DRAWINGS

Please amend Figure 2 to more specifically relate reference numeral 210 with the crossbar 210, and to more specifically relate reference numeral 225 with the trip bar 225. The drawing amendments are described in the application as originally filed at page 3 first paragraph. No new matter has been added.

Please amend Figure 3 to more accurately depict the profile of trip bar 225 as shown in Figures 2 and 4. No new matter has been added.

Clean replacement sheets are provided herewith.